What is claimed is:

1. A protected organic optoelectronic device comprising:

(a) a substrate;

(b) an active region positioned on said substrate;

(c) a first protective layer of a first material disposed over the active region; and

(d) a second protective layer disposed over the first protective layer, wherein said second protective layer comprises multiple sub-layers that further comprise an alternating series of two or more first polymeric sub-layers and two or more first high density sub-layers, wherein said multiple sub-layers comprise at least one sub-layer of a second material and at least one sub-layer of a third material, and wherein said first, second and third materials differ from one another.

2. The protected organic optoelectronic device of claim 1, comprising an OLED, wherein said active region comprises an anode layer, a cathode layer and a light-emitting layer disposed between the anode layer and the cathode layer.

3. The protected organic optoelectronic device of claim 2, wherein said first material comprises a material selected from the group consisting of organometallic materials, inorganic materials, and polymeric materials.

4. The protected organic optoelectronic device of claim 3, wherein said first material comprises an organometallic material.

5. The protected organic optoelectronic device of claim 4, wherein said organometallic material is selected from the group consisting of phthalocyanines and porphyrins.

6. The protected organic optoelectronic device of claim 5, wherein said organometallic material comprises copper phthalocyanine.

7. The protected organic optoelectronic device of claim 3, wherein said polymeric materials are selected from the group consisting of parylenes, perylenes, fluorinated polymers and poly(phenylene vinylenes).

8. The protected organic optoelectronic device of claim 3, wherein said inorganic materials are selected from the group consisting of metals, metal oxides, metal nitrides, metal carbides and metal oxynitrides.

9. The protected organic optoelectronic device of claim 3, wherein said inorganic materials are selected from the group consisting of silicon, silicon oxides, silicon nitrides, silicon carbides, silicon oxynitrides, indium oxides, indium tin oxides, zinc indium tin oxides, tin oxides, aluminum oxides, aluminum nitrides, and titanium oxides.

10. The protected organic optoelectronic device of claim 2, wherein said alternating series comprises 3 to 7 first polymeric sub-layers and 3 to 7 first high-density sub-layers.

11. The protected organic optoelectronic device of claim 2, wherein said substrate comprises one or more polymeric materials selected from the group consisting of polyesters, polyolefins, polycarbonates, polyethers, polyimides and polyfluorocarbons.

12. The protected organic optoelectronic device of claim 2, wherein said one or more polymeric sub-layers comprises a material selected from fluorinated polymers, parylenes, perylenes, cyclotenes and polyacrylates.

13. The protected organic optoelectronic device of claim 2, wherein said one or more high-density sub-layers comprise a material selected from metals, metal oxides, metal nitrides, metal carbides and metal oxynitrides.

14. The protected organic optoelectronic device of claim 2, wherein the first protective layer is disposed over the active region and contacting the cathode.

15. The protected organic optoelectronic device of claim 2, wherein the first protective layer is disposed over the active region and contacting the anode.

16. The protected organic optoelectronic device of claim 2, at least one of said polymeric sub-layers is a polyacrylate disposed over and contacting said first protective layer.

17. The protected organic optoelectronic device of claim 16, wherein said first protective layer comprises an organometallic material.

18. The protected organic optoelectronic device of claim 17, wherein said organometallic material comprises copper phthalocyanine.

19. The protected organic optoelectronic device of claim 2, further comprising a getter layer provided between said first and second protective layers.

20. The protected organic optoelectronic device of claim 2, further comprising end caps extending from a top surface of the device, downwardly along lateral edges of the device, and into contact with the substrate.

21. A protected OLED device comprising a

(a) a substrate;

(b) an active region positioned on said substrate, wherein said active region comprises an anode layer, a cathode layer and a light-emitting layer disposed between the anode layer and the cathode layer;

(c) a first protective layer comprising an organometallic material disposed over the active region; and

(d) a second protective layer disposed over the first protective layer, wherein said second protective layer comprises multiple sub-layers that further comprise an alternating series of two or more first polymeric sub-layers and two or more first high density sub-layers.

22. The protected OLED device of claim 21, wherein said organometallic material is selected from the group consisting of phthalocyanines and porphyrins.

23. The protected OLED device of claim 22, wherein said organometallic material is copper phthalocyanine.

24. The protected OLED device of claim 21, wherein at least one of said polymeric sub-layers is disposed over and contacting said first protective layer.

25. The protected OLED device of claim 24, wherein said polymeric sub-layer is a material selected from the group consisting of fluorinated polymers, parylenes, perylenes, cyclotenes and polyacrylates.

26. The protected OLED device of claim 25, wherein said polymeric sub-layer is a polyacrylate.

27. The protected OLED device of claim 26, wherein said organometallic material is copper phthalocyanine.

28. A method for protecting an organic optoelectronic device comprising:

(a) providing an organic optoelectronic device on a substrate, said organic optoelectronic device having an active region;

(b) vacuum depositing a first protective layer of a first material over the active region;

(c) vacuum depositing a second protective layer over the first protective layer, the second protective layer comprising multiple sub-layers that further comprise an alternating series of two or more first polymeric sub-layers and two or more first high density sub-layers, wherein said multiple sub-layers comprise at least one sub-layer of a second material and at least one sub-layer of a third material, and wherein said first, second and third materials differ from one another.

29. The method of claim 28, wherein said organic optoelectronic device is an OLED device.

30. The method of claim 29, wherein said first material comprises a material selected from the group consisting of organometallic materials, inorganic materials, and polymeric materials.

31. The method of claim 30, wherein said first material comprises an organometallic material.

32. The method of claim 31, wherein said organometallic material is vacuum deposited over a cathode layer in said OLED device.

33. The method of claim 32, wherein a first polymeric sub-layer is vacuum deposited over said organometallic material.

34. The method of claim 32, wherein said organometallic material is selected from the group consisting of phthalocyanines and porphyrins.

35. The method of claim 34, wherein said organometallic material comprises copper phthalocyanine.

36. The method of claim 33, wherein said polymeric sub-layer comprises a material selected from the group consisting of fluorinated polymers, parylenes, perylenes, cyclotenes and polyacrylates.

37. The method of claim 36, wherein said polymeric sub-layer comprises a polyacrylate.

38. The method of claim 37, wherein said organometallic material comprises copper phthalocyanine.